

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) ~~Switching equipment for a communication network, said A~~
communication network comprising:

 ~~an adjacent~~ second switching equipment; and

 first switching equipment which is connected to said the second switching equipment via
~~connecting by connection~~ paths, said connecting the connection paths being divided into
comprising a first set of connection connecting paths and a second set of connection connecting
paths, the first switching equipment allocating a first transmission channel to any one of the first
set of connection paths and the second switching equipment allocating a second transmission
channel to any one of the second set of connection paths, the first switching equipment
comprising:

 a first storage area for storing bits of information associated with an availability of
bandwidth for the first set of connection paths;

 a second storage area for storing bits of information associated with an
availability of bandwidth for the second set of connection paths; and

a controller to determine whether a suitable connection path exists in the first set of connection paths based on the bits of information stored in the first storage area, the suitable connection path providing suitable bandwidth for a requested connection;

wherein if the suitable connection path does not exist in the first set of connection paths,

~~when a connection request is present, said switching equipment is only authorized for said first connecting paths for allocating a transmission channel for said connection request, and said adjacent switching equipment that is connected to said first switching equipment via a corresponding second connecting path is authorized for allocating a corresponding transmission channel for said second connecting paths, said switching equipment comprising:~~

~~a first storage storing bits of information about said free or occupied resources of said first connecting paths;~~

~~a controller detecting, on a basis of said bits of information stored in said first storing means, a suitable first connecting path, which provides sufficient resources for a desired connection, when a connection request is present; and~~

~~a second storage for storing bits of information about said free or occupied resources of said second connecting paths, said the controller selects selecting one of said the second adjacent switching equipment, based on the bits of information stored in the second storage area, to allocate the second transmission channel to the requested connection on a basis of said bits of information stored in said second storage when a suitable first connecting path could not be detected on a basis of said bits of information stored in said first storage given a presence of a connection request, said one of the~~

~~adjacent switching equipment being connected to said switching equipment via one of said second connecting paths, which is more likely able to provide sufficient resources for said desired connection, and said controller transmitting an inquiry message to said selected adjacent switching equipment for allocating a transmission channel for said desired connection.~~

2. (Currently Amended) The network of Switching equipment according to claim 1, wherein ~~said~~ after the controller determines that ~~is fashioned such that it, subsequent to said detection of a~~ the suitable first connecting connection path exists in the first set of connection paths, the controller transmits bits of information associated with ~~about an allocated the first~~ transmission channel for said allocated to the desired requested connection and bits of information associated with about said the detected suitable connecting connection path to said the second adjacent switching equipment, which is connected to said first switching equipment via said detected first connecting path.

3. (Currently Amended) The network of Switching equipment according to claim 2, wherein ~~said controller is fashioned such that it, when~~ if the controller determines that the suitable connection path does not exist in the first set of connection paths ~~a first connecting path with resources that are sufficient for said connection request could not be detected,~~ the controller transmits said an inquiry message to the second switching equipment to allocate for allocating a the second transmission channel for said desired to the requested connection, to said adjacent switching equipment in a forward the inquiry message does not include ~~without~~ bits of

information associated with ~~about said the connecting suitable connection path or nor said the~~
second transmission channel.

4. (Currently Amended) The network of Switching equipment according to claim 1 ~~3~~,
wherein ~~said~~ after the controller transmits ~~fashioned such that it, subsequent to said the~~ inquiry
message to ~~said the second adjacent~~ switching equipment ~~selected by said and after the~~ controller
determines that a suitable connection path is in the second set of connection paths and
~~subsequent to said allocation of a transmission channel via said adjacent switching equipment,~~
the controller updates ~~renews said the~~ bits of information, ~~which are stored in said the~~ second
storage area based ~~on a basis of~~ a confirmation message ~~of said from the second adjacent~~
switching equipment, and

~~whereby said wherein the~~ confirmation message comprises bits of information associated
with ~~about said the second~~ transmission channel ~~allocated by said adjacent switching equipment,~~
~~about an availability of bandwidth resources occupied for said the desired requested~~ connection,
and ~~about said the suitable second connecting connection path selected via said by the second~~
~~adjacent~~ switching equipment.

5. (Currently Amended) The network of Switching equipment according to claim 1,
wherein ~~said~~ communication between ~~said the first~~ switching equipment and ~~said the second~~
~~adjacent~~ switching equipment ensues is accomplished through ~~via~~ B-ISUP signaling
messages.

6. (Currently Amended) The network of Switching equipment according to claim 1,
further comprising:

a third storage area for storing configuration data of ~~said the first~~ switching equipment,
wherein ~~said the~~ configuration data designates ~~prescribe, regarding said switching~~
~~equipment, which of said connecting connection~~ paths connected to ~~said the first~~ switching
equipment are from the first connecting set of connection paths, ~~for which said switching~~
~~equipment is authorized for allocating a transmission channel when a connection request is~~
~~present,~~ and which of ~~said the connection connecting~~ paths are from the second set of connection
~~connecting paths, for which said switching equipment is not authorized, but for which a~~
~~corresponding said adjacent switching equipment is authorized for allocating a transmission~~
~~channel for said connection request.~~

7. (Currently Amended) The network of Switching equipment according to claim 6,
wherein ~~said the~~ configuration data stored in ~~said the~~ third storage area designates which
switching equipment connected to the first switching equipment the first switching equipment
analyzes to determine if the suitable connection path exists ~~prescribe to which said adjacent~~
~~switching equipment said switching equipment is to detect a connecting path when a connection~~
~~request is present.~~

8. (Currently Amended) The network of Switching equipment according to claim 1,
wherein ~~said the~~ communication network is an asynchronous transfer mode (ATM) ATM
broadband communication network.

9. (Currently Amended) A method for using switching equipment in a communications network,

~~said~~ the communications network comprising said first switching equipment, second adjacent switching equipment and connecting connection paths, said the connecting connection paths connecting said the first switching equipment to said the second adjacent switching equipment,

~~said the connecting connection paths comprising a first set of connection connecting paths and a second set of connection connecting paths, the second switching equipment allocating a second transmission channel to any one of the second set of connection paths,~~

~~said the first switching equipment comprising a controller, a first storage, and a second storage, the first switching equipment allocating a first transmission channel to any one of the first set of connection paths,~~

~~said the method comprising the steps of:~~

~~authorizing, by said switching equipment, an allocation of a transmission channel in response to a connection request only for said first connecting paths;~~

~~authorizing, by said adjacent switching equipment, an allocation of a transmission channel in response to a connection request only for said second connecting paths;~~

~~storing, by said in the first storage area, bits of information associated with an availability of bandwidth in the first set of connection paths about free or occupied resources of said first connecting paths;~~

~~detecting, by said controller, determining whether a suitable first connecting connection~~
path exists from the first set of connection paths based on ~~said the~~ bits of information stored in
~~said the~~ first storage area, the suitable connection path providing suitable bandwidth for a
requested connection ~~which provides for desired connections, when a connection request for a~~
~~desired connection is present;~~

storing, ~~by said~~ in the second storage area, bits of information associated with an
availability of bandwidth in the second set of connection paths ~~about free or occupied resources~~
~~of said second connecting paths; and~~

when a the suitable first connecting connection path ~~could not be detected~~ is determined
not to exist in the first set of connection paths ~~in said step of detecting a suitable connection path,~~
~~selecting, by said controller, an~~ the second adjacent switching equipment allocates the second
transmission channel for the requested connection based on a basis of said the bits of information
stored in ~~said the~~ second storage area ~~when a suitable first connecting path could not be detected~~
~~in said step of detecting a suitable first connecting path;~~

~~transmitting, by said controller, an inquiry message to said selected adjacent~~
~~switching equipment for allocating a transmission channel for said desired connection~~
~~requested by said connection request; and~~

~~allocating a transmission channel for said desired connection.~~

10. (Currently Amended) The method of according to claim 9, further comprising ~~the~~
~~step of:~~

after the controller determines that the suitable connection path exists in the first set of

connection paths, transmitting, ~~said controller subsequent to said step of detecting a suitable first~~
~~connecting path~~, bits of information ~~about said~~ associated with the first allocated transmission
channel and bits of information ~~about said detected first connecting~~ associated with the suitable
connection path.

11. (Currently Amended) The method according to claim 10, ~~wherein said further~~
~~comprising transmitting an inquiry message transmitted in said step of transmitting the inquiry~~
~~message is transmitted, as a forward message~~ the inquiry message not including without bits of
information ~~about~~ associated with suitable the connection path ~~said connecting paths or said nor~~
the first transmission channel.

12. (Currently Amended) The method according to claim 9, further comprising ~~the step~~
~~of:~~

~~renewing said~~ after the controller transmits the inquiry message and after allocating the
first transmission channel to the requested connection, updating the bits of information stored in
~~said the second storage area, by said controller subsequent to said step of transmitting an inquiry~~
~~message and subsequent to said step of allocating a transmission channel, based on a~~
confirmation message ~~of said adjacent~~ from the second switching equipment, ~~said the~~
confirmation message comprising bits of information associated with ~~about said the second~~
transmission channel ~~allocated by said adjacent switching equipment, about resources occupied~~
~~for aid desired~~ availability of bandwidth for the connection request, and ~~about said second~~
~~connecting~~ the suitable connection path selected by the second ~~said adjacent~~ switching

equipment.

13. (Currently Amended) The method according to claim 9, wherein communication between ~~said~~ the first switching equipment and ~~said the second adjacent~~ switching equipment ~~ensues~~ is accomplished through ~~via~~ B-ISUP signalization messages.

14. (Currently Amended) The method according to claim 9, wherein ~~said the first~~ switching equipment further comprises a third storage area, ~~said the~~ method further comprising ~~the step of~~:

storing configuration data of ~~said the first~~ switching equipment ~~by said in the~~ third storage area, wherein ~~said the~~ configuration data ~~comprise~~ comprises information about which ~~of~~ ~~said connection~~ ~~connecting~~ paths connected to ~~said the first~~ switching equipment are from the first set of connection ~~connecting~~ paths ~~for which said switching equipment is authorized for allocating a transmission channel when a connection request is present~~, and which of ~~said the~~ connecting paths are from the second set of connection ~~connecting~~ paths ~~for which said switching equipment is not authorized, but for which an adjacent switching equipment is authorized for allocating a transmission channel for said connection request~~.

15. (Currently Amended) The method according to claim 14 wherein ~~said the~~ configuration data further comprises information associated with switching equipment connected to the first switching equipment and information that designates which switching equipment the first switching equipment will analyze to determine if the suitable connection path exists ~~about~~

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~~which adjacent switching equipment said switching equipment is to detect a connection path
when a connection request is present.~~

16. (Currently Amended) The method according to claim 9, wherein said the
communication network is an ATM broadband communication network.